REMARKS

Applicant respectfully requests further examination and reconsideration in view of the above amendments and the arguments set forth below. In the Office Action mailed November 16, 2005, claims 1-4, 6-29 and 31 have been rejected. In response, the Applicant has amended claims 1, 10 and 25, and submitted the following remarks. Accordingly, claims 1-4, 6 - 29 and 31 are pending. Favorable reconsideration is respectfully requested in view of the amended claim and the remarks below.

Rejections Under 35 U.S.C. §103

Within the Office Action, claims 1-4, 6, 8-12, 14-17, 19-21, 23-29 and 31 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,011,991 to Mardirossian (hereinafter Mardirossian) in view of U.S. Patent No. 6,230,048 to Selvester et al (hereinafter Selvester) and U.S. Patent No. 5,003,490 to Castelaz et al (hereinafter Castelaz). The Applicant respectfully disagrees with this rejection.

In the "Response to Arguments" section of the Office Action, in the paragraph that starts on page 12 and begins on page 13, it is stated that the applicant previously argued that "...none of references teach interpreting the physiological data, and generating separate interpretation,..." and that "...the present invention does not merely create a waveform, but rather extracts features of the waveform to be compared with the feature of the previous interpreted physiological data and used to check the interpretation made by the interpretation module."

It is further stated in this same paragraph that these features argued by the applicant in the previous Office Action response are not recited in the rejected claims, and although the claims are interpreted in light of the specification, the limitations from the specification are not read into the claims. The applicant respectfully submits that these features that were argued by the applicant in the previous Office Action were indeed recited, and are still recited in the rejected claims. Furthermore, the applicant has

amended the rejected independent claims in order to clarify these features for the Examiner. Therefore, the applicant respectfully resubmits that none of the cited references, namely Mardirossian, Selvester, nor Castelaz, teach these features as recited in claims 1, 10, and 25.

Castelaz teaches a neural network signal process that can accept, as input, unprocessed signals, such as those directly from a sensor. While Castelaz performs a number of operations on a signal, such as measurement of the pulse width, the amplitude, rise and fall time, frequency, etc., Castelaz does not teach utilizing an interpretation module **to generate a separate interpretation** of the physiological data. In other words, none of the cited references teach interpreting the physiological data and generating a separate interpretation, as is claimed and described in the present invention [specification of present invention, page 5, lines 19-28].

Once again, in contrast to the teachings of Mardirossian, Selvester, Castelaz and their combination, the method and system of the present invention interprets and correlates by measuring the raw data, analyzing numerous characteristics such as wave form height, distance between peaks, and extracting various features of the wave form. The present invention does not merely create a wave form, but rather extracts features of the waveform to be compared with features of previously interpreted physiological data and used to check **the interpretation made by the interpretation module.** The interpretation module then uses the measured features to generate an interpretation of the physiological data [present invention, page 5, lines 19-28].

The amended independent claim 1 is a method of providing real time decision support in the review of physiological data comprising establishing a library of interpreted physiological data records, gathering of physiological data, interpreting the physiological data based on a predetermined set of criteria such that a separate interpretation is generated, wherein the interpreting step includes measuring the physiological data, analyzing a set of characteristics associated with the physiological data, extracting one or more patterns from the physiological data to generate the separate

interpretation and comparing the separate interpretation from the physiological data to a set of known patterns, correlating the separate interpretation to one or more of the physiological data records in the library of physiological data records and displaying the interpretation in the correlated physiological data records on a display. As discussed above, neither Mardirossian, Selvester, Castelaz nor their combination teach interpreting the physiological data based on a predetermined set of criteria to generate a separate interpretation. For at least these reasons, claim 1 is allowable over the teachings of Mardirossian, Selvester and their combination.

Claims 2-4, 6, 8 and 9 are all dependent upon the independent claim 1. As discussed above, the independent claim 1 is allowable over the teachings of Mardirossian, Selvester and their combination. Accordingly, the dependent claims 2-6, 8 and 9 are all also allowable as being dependent upon an allowable base claim.

The amended independent claim 10 is directed to a physiological data interpretation system comprising a library of physiological data records, a physiological data acquisition device capable of acquiring physiological data and coupled to the library of physiological data records, the acquisition device having an interpretation module to generate a separate interpretation of the physiological data and a correlation module to compare the separate interpretation to the records in the library of physiological records and determine a set of correlated data records, wherein the interpreting step includes measuring the physiological data, analyzing a set of characteristics associated with the physiological data, extracting one or more patterns from the physiological data to generate the separate interpretation, and comparing the extracted patterns from the physiological data to a set of known patterns and an output device coupled to the acquisition device that displays the interpretation and the correlated physiological data records. As discussed above, neither Mardirossian, Selvester, Castelaz nor their combination teach a separate interpretation module to generate an interpretation of the physiological data. For at least these reasons, the independent claim 10 is allowable over the teachings of Mardirossian, Selvester, Castelaz and their combination.

Claims 11, 12, 14-17, 19-21, 23 and 24 are dependent upon the independent claim 10. As discussed above, the independent claim 10 is allowable over the teachings of Mardirossian, Selvester, Castelaz and their combination. Accordingly, the dependent claims 11, 12, 14-17, 19-21, 23 and 24 are all also allowable as being dependent upon an allowable base claim.

The amended independent claim 25 is directed to a method of interpreting physiological data. The Applicant respectfully submits that the independent claim 25 is allowable for substantially the same reasons as the independent claim 1 is allowable as discussed above. Claims 26-29 and 31 are all dependent upon the independent claim 25. As discussed above, the independent claim 25 is allowable over the teachings of Mardirossian, Selvester, Castelaz and their combination. Accordingly, the dependent claims 26-29 and 31 are all allowable as being dependent upon an allowable base claim.

Within the Office Action, claim 7 has been rejected under 35 U.S.C. §103 as being unpatentable over Mardirossian in view of Selvester as applied to claim 1 above, and further in view of U.S. Patent No. 6,139,494 to Cairnes (hereinafter Cairnes). Claim 7 is dependent upon the independent claim 1. As discussed above, the independent claim 1 is allowable over the teachings of Mardirossian, Selvester, Castelaz and their combination. Accordingly, the independent claim 7 is allowable as being dependent upon an allowable base claim.

Within the Office Action, claim 18 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Mardirossian in view of Selvester as applied to claim 10 above, and further in view of U.S. Patent No. 6,203,495 to Bardy (hereinafter Bardy). Claim 18 is dependent upon the independent claim 10. As discussed above, the independent claim 10 is allowable over the teachings of Mardirossian, Selvester, Castelaz and their combination. Accordingly, claim 18 is allowable as being dependent upon an allowable base claim.

Within the Office Action, claims 13 and 22 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Mardirossian in view of Selvester as applied to claims

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10 and 12 above, and further in view of U.S. Patent No. 6,264,614 to Albert el al (hereinafter Albert). Claims 13 and 22 are dependent upon the independent claim 10. As discussed above, the independent claim 10 is allowable over the teachings of Mardirossian, Selvester, Castelaz and their combination. Accordingly, claims 13 and 22 are also allowable as being dependent upon an allowable base claim.

For the reasons given above, Applicant respectfully submits that the claims are now in condition for allowance, and allowance at an early date would be appreciated. Should the Examiner have any questions or comments, they are encouraged to call the undersigned at 414-271-7590 to discuss the same so that any outstanding issues can be expeditiously resolved.

Respectfully submitted,

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